

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE PRIMARY EXAMINER

Application of

Inventors : Paul A. Siudzinski, Jonathan C. Hauberg, David A. Stammen, Donald F. Schmidt & Dennis D. Cox
Title : PATIO DOOR ASSEMBLY WITH EXTRUDED PLASTICS COMPONENTS
Group Art Unit : 3635
Docket : 7709-C

Commissioner for Patents
Patent and Trademark Office
Washington, D.C. 20231

Sir:

PRELIMINARY AMENDMENT

Please enter the following amendment in the above identified application which is a continuation of application Serial No. 09/439,275 filed November 12, 1999.

IN THE CLAIMS

Please cancel claims 1-22 without prejudice and add the following claims:

23. In a patio door assembly including a rectangular main frame having a pair of vertical jamb members rigidly connected by a top head member and a bottom sill member, a separate vertical astragal member spaced between said jamb members and rigidly connected to said head and sill members, a first door panel within said main frame and said first door panel including a rectangular door panel frame supporting a glass panel, a second door panel within said main frame and said second door panel including a rectangular door panel frame supporting a glass panel, said astragal member and each of said door panel frames and said members of said main frame comprising extrusions of rigid plastics material, and said main frame and each of said door panel frames

having welded mitered corner joints, the improvement wherein each of said door panel frames includes elongated frame members each having parallel spaced outer side walls and inner walls spaced substantially parallel to said side walls, a first plurality of spaced internal walls extending laterally between said side walls and said inner walls and integrally connecting said side walls to said inner walls, a second plurality of spaced internal walls extending laterally between said inner walls and integrally connecting said inner walls, and a hinge having an inactive leaf secured by threaded fasteners to said astragal member and an active leaf secured by fasteners threaded into said internal walls of an adjacent said frame member of said second door panel.

24. A patio door assembly as defined in claim 23 wherein said hinge extends from said head member to said sill member, and said inactive leaf of said hinge is longer than said active leaf of said hinge and precisely positions said second door panel in spaced relation between said head and sill members.

25. A patio door assembly as defined in claim 23 wherein said astragal member includes parallel spaced opposite side walls integrally connected by interior and exterior end walls, stop portions integral with said side walls and projecting laterally outwardly from said side walls adjacent said frames of said door panels, a plurality of spaced internal walls extending laterally of said side walls of said astragal member and integrally connecting said side walls, and said internal walls spaced adjacent said interior and exterior end walls of said astragal member having longitudinally extending portions defining holes receiving vertical threaded fasteners extending through said head and sill members.

26. A patio door assembly as defined in claim 23 and including a metal approach member mounted on said sill member, said approach member having an upwardly projecting horizontal track extending between said jamb members and adapted to support a sliding screen door, said approach member including an inner portion defining a groove, and a flexible door seal projecting into said groove.

27. A patio door assembly as defined in claim 23 and including an angular insert strip attached by a snap-fit to exterior portions of said head and jamb members to define a channel adapted to receive a sliding screen door.

28. A patio door assembly as defined in claim 23 wherein each of said door panel frames defines a peripherally extending and laterally outwardly facing external groove, and a rigid spacer member extending within said groove.

29. A patio door assembly as defined in claim 28 wherein said groove in each said door panel frame is defined by spaced inner walls having opposing ribs projecting into said groove, and said spacer member comprises a spacer channel having U-shaped portions engaging said ribs with a snap-fit connection.

30. A patio door assembly as defined in claim 23 and including a latch mechanism mounted within said door panel frame of said second door panel between said parallel spaced inner walls.

31. A patio door assembly comprising a rectangular main frame including a pair of vertical jamb members rigidly connected by a top head member and a bottom sill member, said main frame further including a vertical astragal member spaced between said jamb members and rigidly connected to said head and sill members, a first door panel within said main frame and including a rectangular door panel frame supporting a glass panel, a second door panel within said main frame and including a rectangular door panel frame supporting a glass panel, said astragal member and each of said door panel frames and said members of said main frame comprising extrusions of rigid plastics material, said main frame and each of said door panel frames having welded mitered corner joints, a hinge having an inactive leaf secured to said main frame and an active leaf secured to said frame of said second door panel, said head and jamb members having exterior portions, and an angular insert strip attached by a snap-fit to said exterior portions to define a channel adapted to receive a sliding screen door.

32. A patio door assembly comprising a rectangular main frame including a pair of vertical jamb members rigidly connected by a top head member and a bottom sill member, said main frame further including a vertical astragal member spaced between said jamb members and rigidly connected to said head and sill members, a first door panel within said main frame and including a rectangular door panel frame supporting a glass panel, a second door panel within said main frame and including a rectangular door panel frame supporting a glass panel, said astragal member and each of said door panel frames and said members of said main frame comprising extrusions of rigid plastics material, said main frame and each of said door panel frames having welded mitered corner joints, a hinge having an inactive leaf secured to said main frame and an active

Docket No. 7709-C

leaf secured to said frame of said second door panel, said first door panel frame having spaced inner walls defining a peripherally extending and laterally outwardly facing external groove, and a rigid spacer member confined within said groove.


33. A patio door assembly as defined in claim 32 wherein said inner walls of said first door panel frame includes opposing ribs projecting inwardly from said inner walls into said groove, and said spacer member comprises a spacer channel having U-shaped portions engaging said ribs with a snap-fit connection.

REMARKS

For purpose of examination, Applicant desires to replace originally filed claims 1-22 with new claims 23-33.

Respectfully submitted,

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